

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number
WO 2004/053048 A1

(51) International Patent Classification⁷: C11D 17/00, 17/04, 3/20, 7/26

(21) International Application Number: PCT/EP2003/012365

(22) International Filing Date: 6 November 2003 (06.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 102 57 390.5 6 December 2002 (06.12.2002) DE

(71) Applicant (for all designated States except US): ECO-LAB INC. [US/US]; 370 Wabasha Street N, St. Paul, MN 55102-1390 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PATTEN, Anja [DE/DE]; Grünwaldstrasse 49, 40764 Langenfeld (DE). ROSSNER, Dietmar [DE/DE]; Mühlenstrasse 11, 40721 Hilden (DE). KRACK, Ralf [DE/DE]; Humboldstrasse 86, 40237 Düsseldorf (DE).

(74) Agent: STERNAGEL, FLEISCHER, GODEMEYER & PARTNER; An den Gärten 7, 51491 Overath (DE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/053048 A1

(54) Title: ACIDIC SOLIDS

(57) Abstract: The invention relates to acidic cleaning compositions in the form of solid blocks which contain citric acid and one or more acids selected from adipic, succinic and glutaric acid as acidic components and to their production and use.